

Claims

1. A device for storing a dressing (01, 36, 37) of a length (L), which is to be supplied to a cylinder (06, 31, 33) of a printing press, wherein, in a first operating state, a holder (58) maintains the dressing (01, 36, 37) in a first storage position, wherein the holder (58) and the dressing (01, 36, 37) are released from each other during a change into a second operating state, characterized in that with its release from the holder, the dressing (01, 36, 37) changes into a second storage position, which is vertically distanced from the first storage position along its length (L).

2. The device in accordance with claim 1, characterized in that prior to its being supplied to the cylinder (06, 31, 33), the dressing (01, 36, 37) to be supplied is stored in the second storage position.

3. The device in accordance with claim 1, characterized in that in the course of being released from the holder (58), the dressing (01, 36, 37) falls out of its first storage position because of the force of gravity (FG) acting on it.

4. The device in accordance with claim 1, characterized in that the dressing (01, 36, 37) is made of an elastically deformable material and has an inherent elastically resilient property.

5. The device in accordance with claim 1, characterized in that in its second storage position the dressing (01, 36, 37) rests on a support (54).

6. The device in accordance with claim 5, characterized in that in its second storage position the dressing (01, 36, 37) rests on the support (54) along its linear length (L).

7. The device in accordance with claim 6, characterized in that a conveying device (57) transports the dressing (01, 36, 37) resting on the support (54) to the cylinder (06, 31, 33) in a translatory movement.

8. The device in accordance with claim 6, characterized in that a pusher (56) transports the dressing (01, 36, 37) resting on the support (54) to the cylinder (06, 31, 33).

9. The device in accordance with claim 1, characterized in that at least two dressings (01, 36, 37) can be arranged along the circumference of the cylinder (06, 31, 33).

10. The device in accordance with claim 1, characterized in that at least two dressings (01, 36, 37) can be arranged in the axial direction of the cylinder (06, 31, 33).

11. The device in accordance with claim 1, characterized in that at least four dressings (01, 36, 37) can be arranged in the axial direction of the cylinder (06, 31, 33).

12. The device in accordance with claim 1, characterized in that a chute (43, 44) is provided for storing at least two dressings (01, 36, 37) to be supplied to the cylinder (06, 31, 33).

13. The device in accordance with claim 12, characterized in that at least as many dressings (01, 36, 37) can be stored in the chute (43, 44) as dressings (01, 36, 37) can be arranged on the cylinder (06, 31, 33) along its circumference.

14. The device in accordance with claim 12, characterized in that at least two dressings (01, 36, 37), which adjoin each other in the axial direction of the cylinder (06, 31, 33), can be stored in the chute (43, 44).

15. The device in accordance with claim 12, characterized in that at least two chutes (43, 44) are arranged side-by-side in the axial direction of the cylinders (05, 31, 33).

16. The device in accordance with claim 12, characterized in that at least two dressings (01, 36, 37) can be stored side-by-side in the chute (43, 44) in the axial direction of the cylinder (06, 31, 33).

17. The device in accordance with claim 1, characterized in that one dressing (01, 36, 37) is respectively stored in the first and the second storage position, wherein the stored dressings (01, 36, 37) do not touch each other.

18. The device in accordance with claim 1, characterized in that in relation to the production direction (P) of the cylinder (06, 31, 33), the dressing (01, 36, 37) has a leading end (03) and a trailing end (04), wherein a beveled suspension leg (14) of a length (l14) is embodied at least at the trailing end (04).

19. The device in accordance with claim 18, characterized in that the suspension leg (14) at the trailing end (04) is beveled at an opening angle (β_1) between 30° and 140° in respect to the linear length (L) of the dressing (01, 36, 37).

20. The device in accordance with claim 18, characterized in that the suspension leg (14) at the trailing end (04) is beveled at an opening angle (β_1) between 80° and 135° in respect to the linear length (L) of the dressing (01, 36, 37).

21. The device in accordance with claim 18, characterized in that the suspension leg (14) at the trailing end (04) is beveled at right angles in respect to the linear length (L) of the dressing (01, 36, 37).

22. The device in accordance with claim 18, characterized in that the dressing (01, 36, 37) rests on the support (54) with its suspension leg (14) at the trailing end (04).

23. The device in accordance with claim 18, characterized in that the first storage position and the second storage position have a distance (a54) from each other, wherein the distance (a54)

lies between twice and four times the length (l14) of the suspension leg (14) at the trailing end (04) of the dressing (01, 36, 37).

24. The device in accordance with claim 18, characterized in that a suspension leg (13) beveled at the leading end (03) is beveled at an acute opening angle (α_1) in relation to the linear length (L) of the dressing (01, 36, 37).

25. The device in accordance with claim 12, characterized in that a further chute (41, 42) is provided, which stores at least one dressing (01, 36, 37) which is to be removed from the cylinder (06, 31, 33).

26. The device in accordance with claim 12 or 25, characterized in that at least one of the chutes (41, 42, 43, 44) receives the dressings (01, 36, 37) in their full length (L).

27. The device in accordance with claim 1, characterized in that the cylinder (06, 31, 33) is designed as a forme cylinder (06, 31, 33).

28. The device in accordance with claim 1, characterized in that the dressing (01, 36, 37) is designed as a printing forme (01, 36, 37).

29. The device in accordance with claim 6, characterized in that during the feeding of the dressing (01, 36, 37) to the cylinder (06, 31, 33), the support (54) has an inclination of less than 15° in respect to a horizontal line.

30. The device in accordance with claim 6, characterized in that during the feeding of the dressing (01, 36, 37) to the cylinder (06, 31, 33), the support (54) is horizontally aligned.

31. The device in accordance with claim 6, characterized in that the support (54) is provided in the chute (43, 44).

32. The device in accordance with claim 6, characterized in that a transport plane for the dressing (01, 36, 37) to be fed to the cylinder (06, 31, 33) is oriented parallel in respect to the support (54).

33. The device in accordance with claim 32, characterized in that the transport plane is oriented substantially orthogonally in respect to the force of gravity (FG).

34. The device in accordance with claim 1, characterized in that the second storage position of the dressing (01, 36, 37) is arranged perpendicularly underneath its first storage position.

35. The device in accordance with claim 6, characterized in that the support (54) is designed in the form of parallel strips (54) or sliding rails (54).

36. The device in accordance with claim 6, characterized in that the support (54) is aligned tangentially in respect to the cylinder (01, 31, 33).

37. The device in accordance with claim 1, characterized in that the holder (58) is provided in the chute (43, 44).

38. The device in accordance with claim 1, characterized in that for holding the dressing (01, 36, 37), the holder (58) has holding elements (61, 62, 64).

39. The device in accordance with claim 38, characterized in that the dressing (01, 36, 37), which is maintained in the first storage position, is clamped between holding elements (61, 62, 64).

40. The device in accordance with claim 38, characterized in that the holding elements (61, 62, 64) have a clear distance (a58) between each other which is shorter than the linear length (L) of the dressing (01, 36, 37).

41. The device in accordance with claim 38, characterized in that at least one of the holding elements (61, 62, 64) is movable.

42. The device in accordance with claim 38, characterized in that at least one of the holding elements (61, 62, 64) is linearly movable.

43. The device in accordance with claim 38, characterized in that at least one of the holding elements (61, 62, 64) is movable parallel in respect to the second storage position.

44. The device in accordance with claim 38, characterized in that at least one of the holding elements (61, 62, 64) can be shifted or pivoted.

45. The device in accordance with claim 38, characterized in that two holding elements (61, 62, 64), which are located opposite each other and hold the dressing (01, 36, 37), are movable.

46. The device in accordance with claim 41, characterized in that a moved holding element (61, 62, 64) at least briefly increases the distance (a58) between oppositely located holding elements (61, 62, 64).

47. The device in accordance with claim 41, characterized in that a moved holding element (61, 62, 64) increases the distance (a58) between oppositely located holding elements (61, 62, 64) by the value, which the dressing (01, 36, 37) which is arranged between the holding elements (61, 62, 64) has for its dimension (L, B) which is aligned with the distance (a58).

48. The device in accordance with claim 41, characterized in that by means of their movement, the holding elements (61, 62, 64) make possible the placement of the second dressing (01, 36, 37) on the support (54).

49. The device in accordance with claim 41, characterized in that the holding element (61, 62, 64) can be moved by pneumatic actuation.

50. The device in accordance with claim 38, characterized in that the holding elements (61, 62, 64) consist of stops (61, 62) which are located opposite each other.

51. The device in accordance with claim 38, characterized in that the holding elements (61, 62, 64) enclose the dressing (01, 36, 37) over its length (L).

52. The device in accordance with claim 38, characterized in that the holding elements (61, 62, 64) consist of respective guide rails (64).

53. The device in accordance with claim 52, characterized in that the dressing (01, 36, 37) can be pushed between the guide rails (64).

54. The device in accordance with claim 52, characterized in that the guide rails (64) enclose the width (B) of the dressing (01, 36, 37).

55. The device in accordance with claim 38, characterized in that at least one holding element (61, 62, 64) holds a suspension leg (13, 14) formed on the dressing (01, 36, 37) in a positively connected manner.

56. The device in accordance with claim 12, characterized in that at least one code reader (71) is provided in the chute (43, 44), wherein the code reader (71) detects a characteristic applied to the dressing (01, 36, 37) for its identification.

57. The device in accordance with claim 8, characterized in that the pusher (56) is embodied as a register pin (56).

58. The device in accordance with claim 7, characterized in that the conveying device (57) is embodied as a pneumatic linear drive (57).

59. The device in accordance with claim 7, characterized in that the conveying device (57) is embodied as a linear drive mechanism (57) without a piston rod.

60. The device in accordance with claim 7, characterized in that the conveying device (57) is embodied as a double-sided acting linear drive mechanism (57).

61. The device in accordance with claim 1, characterized in that the printing press has at least two printing groups.

62. The device in accordance with claim 61, characterized in that a material (46) to be imprinted runs vertically through the printing groups.

63. The device in accordance with claim 1, characterized in that the printing press is embodied as a multi-color offset printing press.

64. The device in accordance with claim 1, characterized in that in its second storage position, the dressing (01, 36, 37) to be fed in is stored at least with its leading end (03) inside the chute (43, 44).

65. The device in accordance with claim 1, characterized in that the first storage position and the second storage position

of the dressing (01, 36, 37) to be supplied are provided within the same chute (43, 44).

66. A method for supplying dressings (01, 36, 37) to a cylinder (06, 31, 33) of a printing press, wherein the dressings (01, 36, 37) to be supplied to the cylinder (06, 31, 33) are stored in accordance with their length (L) without touching each other, wherein dressings (01, 36, 37), which are to be supplied sequentially to the cylinder (06, 31, 33) are stored along their length (L) on top of each other in storage positions, which are vertically spaced apart from each other, characterized in that at least one of the dressings (01, 36, 37) is supplied to the cylinder (06, 31, 33) only after a change from a vertically top to a vertically bottom storage position.

67. The method in accordance with claim 66, characterized in that the dressing (01, 36, 37) arranged at the bottom is fed to the cylinder (06, 31, 33) in a transport plane, which is arranged substantially orthogonally in respect to the force of gravity (FG).

68. The method in accordance with claim 66, characterized in that the dressing (01, 36, 37) arranged at the bottom is fed to the cylinder (06, 31, 33) by means of a thrusting force acting on the trailing end (04) of the dressing (01, 36, 37).

69. The method in accordance with claim 66, characterized in that several dressings (01, 36, 37), which are arranged on top of each other, are arranged on the cylinder (06, 31, 33) along its circumference.

70. The method in accordance with claim 66, characterized in that several stacks of dressings (01, 36, 37) which are arranged on top of each other, are arranged side-by-side in the axial direction of the cylinder (06, 31, 33).

71. The method in accordance with claim 70, characterized in that several dressings (01, 36, 37) which are arranged side-by-side in the axial direction of the cylinder (06, 31, 33), are simultaneously fed to the cylinder (06, 31, 33).

72. The method in accordance with claim 66, characterized in that the dressing (01, 36, 37), which is to be fed to the cylinder (06, 31, 33), is conveyed to the cylinder (06, 31, 33) in a linear movement.

73. The method in accordance with claim 66, characterized in that the dressing (01, 36, 37), which is to be fed to the cylinder (06, 31, 33), is conveyed to the cylinder (06, 31, 33) in its extended length (L).

74. The method in accordance with claim 66, characterized in that the dressing (01, 36, 37), which is to be fed to the cylinder (06, 31, 33), is placed on a support (54) with its suspension leg (14).

75. The method in accordance with claim 66, characterized in that the dressing (01, 36, 37), which is to be fed to the cylinder (06, 31, 33), is pushed to the cylinder (06, 31, 33) by means of a pusher (56), which acts on its suspension leg (14).